

Application No. 10/708,928
Amendment dated
After Final Office Action of July 28, 2005

Docket No.: 60680-1780

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to FIGS. 3 and 4 .

Attachment: Replacement sheet
Annotated sheet showing changes

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REMARKS

Applicants have carefully reviewed the Office Action mailed July 28, 2005, and thank Examiner Sharp for his detailed review of the pending claims. In response to the Office Action, Applicants have not amended the claims. Accordingly, claims 1 and 3-8 remain pending in this application. Applicants respectfully request reconsideration of the present application in view of the following remarks.

Drawings

FIGS. 3 and 4 were objected to for not displaying information relating to Day 7 and Day 10, and for illegible data lines. Accordingly, Applicants have amended FIGS. 3 and 4 to clearly identify data lines and information pertaining to "Day 7" and "Day 10".

Claim Rejections – 35 U.S.C. § 102

Claims 1 and 3-8 were rejected under 35 U.S.C. § 102(b) as anticipated by *Baumann* U.S. 4,684,103. Applicants respectfully traverse the rejection.

To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent claims 1 and 7 positively recite that "the fastener assembly acoustically decouples the components." The Examiner states, in describing the teachings of *Baumann*, that "[t]he fastener assembly acoustically decouples components 13 and 24." However, components 13 and 24 of *Baumann* are not acoustically decoupled. In FIGS. 1 and 2 of *Baumann*, pins (not numbered) inserted through bores 14 are used to directly connect components 13 to component 24. Thus, vibrations experienced in component 24 will be transmitted to each component 13. Therefore, *Baumann* does not teach each limitation of independent claims 1 and 7.

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Furthermore, the Examiner identifies items 19, 22 and 30 of Baumann as a 'fastener assembly.' However, these components are not taught in Baumann as a fastener for anything. Specifically, Baumann mentions, in column 2, lines 64-68, that "displacement piston (19) may be configured in two parts; the lower one (30) of which has a threaded extension which can be screwed in or out of the upper portion of displacement piston (19) to effect a correction in distance." This quotation from Baumann reveals that items 19 and 30 are intended as a means to adjust the length of item 19, and not as a fastener. Accordingly, Applicants submit that one of skill in the art would not view the displacement piston 19 of Baumann as being useful as a fastener for acoustically decoupling two components.

Dependent claims 3-6 and 8 are also patentable by being dependent on an allowable base claim. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1 and 3-8 were rejected under 35 U.S.C. § 102(b) as anticipated by *Hu* U.S. 6,745,995. Applicants respectfully traverse the rejection.

Independent claims 1 and 7 positively recite that "the fastener assembly acoustically decouples the components." The Examiner states, in describing the teachings of *Hu*, that "[t]he fastener assembly acoustically decouples components 16 and 12." However, components 16 and 12 of *Hu* are not acoustically decoupled. Components 16 and 12 are directly coupled having contacting surfaces, as clearly shown in FIG. 17 of *Hu*. Thus vibrations will be readily transmitted between components 16 and 12. Therefore, *Hu* does not teach each limitation of independent claims 1 and 7.

The Examiner identifies items 5b, 9, and 14 of *Hu* as a 'fastener assembly.' However, these components are not taught in *Hu* as any type of fastener assembly. The Examiner has cobbled together various elements of *Hu*, but has failed to identify any disclosure of *Hu* to support the purported teaching. Specifically, the Examiner has selected item 9 from FIG. 1 and items 5b and 14 from FIG. 16 as teaching a "fastener assembly". However, *Hu* describes FIG. 16 as presenting an alternative mechanism as that presented in FIG. 1. (See *Hu*, Column 3, lines 12-14) FIG. 16 does not illustrate item 9, and FIG. 1 does not illustrate items 5b and 14. Accordingly, *Hu* does not teach combining these items to form a "fastener assembly".

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As best seen in FIG. 1, item 9 of Hu directly bolts together items 4 and 1, with no chance of any acoustic decoupling therebetween. Also, item 14 is not a wave spring, but a spring that transmits torque from a worm gear 5b to a clutch base 12. (See Hu, column 5, lines 62-67 and FIGS. 17 and 18).

As further support that Hu does not teach combining these items to form a fastener assembly, FIGS. 17 and 18 illustrate items 5b and 14, but do not illustrate item 9. FIGS 17 and 18 of Hu are described as illustrating a worm gear subassembly, with no mention or suggestion of a fastening assembly. (See Hu, Column 3, lines 15-18). Accordingly, Applicants submit that one of skill in the art would not view the worm gear assembly of FIGS. 17 and 18 of Hu as a teaching of any type of fastening assembly.

Dependent claims 3-6 and 8 teach independently patentable subject matter, although they are also patentable merely by being dependent on an allowable base claim. As an example, claim 3 recites "wherein the head portion of the threaded fastener includes a radially projecting collar." These teachings are not taught in Hu, as item 9 has a head and no collar. Reconsideration and withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

The remarks presented above with respect to the §102 rejections are equally applicable here. Specifically, the failure of Baumann and Hu to teach every element of the independent claims 1 and 7 is just as fatal to the §103 rejections discussed herein.

Claims 1 and 3-8 were rejected under 35 U.S.C. § 103(a) as obvious over *Baumann* U.S. 4,684,103. Applicants respectfully traverse the rejection.

When rejecting a claim based upon a sole 35 U.S.C. 103(a) reference, the Federal Circuit has provided some guidance. Specifically, *In re Gordon* provides that "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." 221 USPQ 1125, 1127 (CAFC 1984). In addition, the Federal Circuit has held that "[i]t is not pertinent whether the prior art device possesses the functional characteristics of the claimed invention if the reference does not describe or suggest its structure." *In re Mills*, 16 USPQ2d 1430, 1433 (1990).

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As mentioned above, independent claims 1 and 7 positively recite that "the fastener assembly acoustically decouples the components." Baumann makes no mention of acoustically decoupling components. The Examiner has identified a displacement piston 19 that has a lower part 30 and a wave spring 22 in Baumann as a "fastener assembly" that "acoustically decouples components (13) and (24)." However, as mentioned above, components 13 and 24 of Baumann are not acoustically decoupled. Accordingly, The Examiner has not met the burden of *In re Mills*.

Dependent claims 3-6 and 8 are also patentable by being dependent on an allowable base claim. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1 and 3-8 were rejected under 35 U.S.C. § 103(a) as obvious over *Hu* U.S. 6,745,995. Applicants respectfully traverse the rejection.

In re Fritch provides that "the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art," and that "the Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." 23 USPQ2d. 1780, at 1783. In focusing efforts to meet this burden, the Federal Circuit concluded that "under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." *Id.* (Emphasis in original)

As mentioned above, the Examiner has selected items from FIGS. 1 and 16 of *Hu* to make a "fastener assembly". However, the Examiner has not explained how these items couple components 12 and 16, nor has the Examiner provided any motivation for one of skill in the art to somehow combine items 5b, 9, and 14 of *Hu* to couple components 12 and 16. Therefore, the Examiner is respectfully requested to provide motivation for making the proposed combination, as required by *In re Fritch*.

Dependent claims 3-6 and 8 are also patentable by being dependent on an allowable base claim. Reconsideration and withdrawal of this rejection is respectfully requested.

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Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Penn et al.* (U.S. Patent No. 4,456,268) in view of *Seymour II, et al.* (U.S. Patent No. 2004/0159310A1) and *Greenhill* U.S. 4,752,178. Applicants respectfully traverse the rejection.

MPEP Section 2143 sets forth the basic requirements for the Patent and Trademark Office to establish prima facie obviousness as follows: "To establish a prima facie case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."

The Examiner states that Seymour presents wave springs and Belleville washers as "equivalents/replacements." Assuming *arguendo*, that Seymour does present Belleville washers and wave springs as equivalents for the purposes of Seymour, it would not necessarily follow that Belleville washers and wave springs are equivalents for the purposes of the present application. (See generally, *In re Ruff*, 118 USPQ 340, CCPA 1982). Seymour provides, on page 2, paragraph [0025], that "Belleville washers have a unique ability to provide high loads in restricted spaces." Seymour proceeds with "[t]he wavy washer 62b has the same features as described above with reference to The Belleville washer 62a." (paragraph [0027]). Thus, Seymour uses a washer as a component that provides a high preload (See generally, paragraphs [0025] and [0030]), and mentions that a wavy washer will provide a high preload as well. Accordingly, if Seymour can be taken as teaching equivalency of Belleville washers and wave springs, it would be in the context of high preload only.

Seymour makes no mention of Belleville washers being useful for acoustically decoupling components. Therefore, Seymour cannot be taken as a teaching for Belleville washers and wave springs as equivalents in acoustically decoupling components.

A case of obviousness also requires that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See MPEP § 2143; *In re Linter*, 458 F.2d 1013, 173 USPQ 560, 562 (CCPA 1972). The mere fact that references can

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be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990), *W.L. Gore and Associates, Inc. v. Garlock, Inc.* 220 USPQ 303 (CAFC, 1966). Moreover, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

The Examiner has combined the bolt of Penn with the wavy washer 62b of Seymour to reject independent claim 1. Penn teaches a shoulder bolt for use in fastening that includes a Belleville washer. However, Penn does not mention the desirability of combining bolt 10 with a wave spring, as positively recited in independent claim 1. Seymour teaches a bolt 48 and a wavy washer 62b, however, there is no mention that the wavy washer 62b may be positioned around the bolt 48. Indeed, Seymour teaches that the wavy washer is positioned around a fuel injector body 20, not around a fastener. Furthermore, there is nothing in Seymour to indicate that the fastening mechanism for a fuel injector is equivalent to the bolt of Penn. Accordingly, neither Penn nor Seymour provide the requisite motivation to make the proposed combination.

The Examiner states that "Greenhill merely demonstrates that the wave springs may be adapted to be sized to fit either within or around a retention sleeve." However, contrary to this assertion, the wave ring 10 of Greenhill cannot be positioned around the working element 12. Additionally, Greenhill teaches a circular, waved ring 10 that is "adapted to retain working elements 12 used in association with either a generally cylindrical shaft 14 or in a generally cylindrical bore 16. To accommodate the ring 10, each shaft or bore is provided with an annular groove 31, 31'." (Abstract, Column 3, lines 16-21). Therefore, Greenhill teaches the need for an annular groove to accommodate the ring. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

In view of the above amendment and remarks, the pending application is in condition for allowance. If, however, there are any outstanding issues that can be resolved by telephone conference, the Examiner is earnestly encouraged to telephone the undersigned representative.

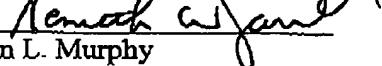
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Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 60680-1780 from which the undersigned is authorized to draw.

Dated: September 28, 2005

Respectfully submitted,

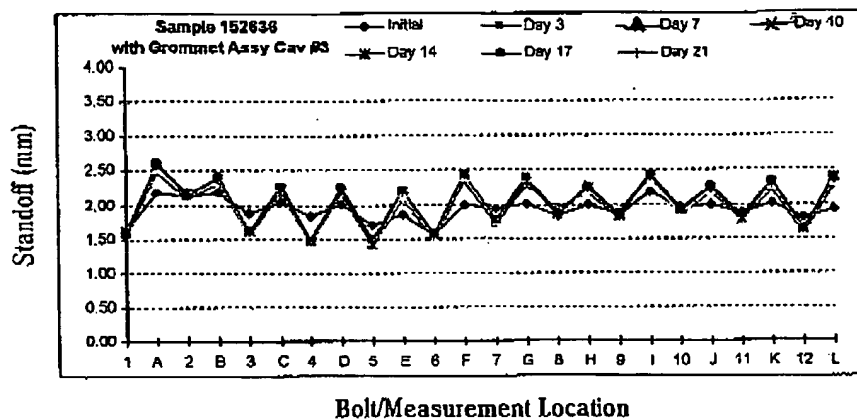
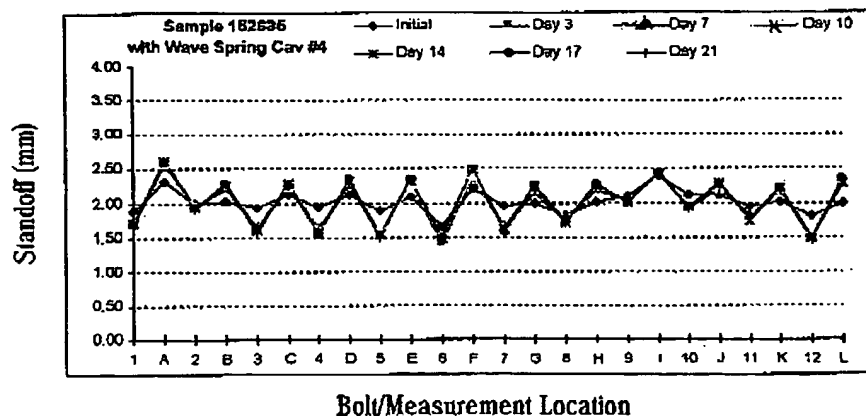
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Attachments

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Title: Fastener Assembly With Wave Spring
Atty. Docket No.: 60680-1780

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ANNOTATED SHEET SHOWING CHANGES**FIG. 3****FIG. 4****BEST AVAILABLE COPY**